

REPUBLIC OF CUBA

SUPERIOR BOARD OF HEALTH

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When the control of Cuba was transferred by the United States of America to the Government elected by the Cuban people, all the sanitary affairs of the new Republic were placed under the immediate direction of a Cuban Chief Sanitary Officer as a dependency of the Secretary of Government, until the Superior Board of Health was definitely constituted in January 1903, as a scientific body organized in accordance with modern ideas, for the purpose of directing and studying all matters connected with the public health. Since February 1904, however, the Maritime Quarantine Service was separated from the land service becoming a dependency of the Treasury Department of the Island.

The Board consists of eleven members, divided into active and honorary; the active are: the Chief Sanitary Officer of the Island as President of the Board, the President of the Commission of Special Hygiene (Prostitution) and three representatives, for the Eastern and Western part of Cuba and the City of Havana; while the Chief Quarantine Officer of the Port of Havana, and the representatives appointed by the Havana Academy of Medical Sciences, Anti-tuberculosis League, National University, Board of Education and a Lawyer, are its honorary members.

The main duties of the Board are to investigate the causes of infectious diseases with special reference to epidemics, condition of public buildings, quality or purity of liquors, medicines and food; due attention being given to reports, data or other information concerning the public health, specially such as are furnished by dispensaries, asylums, hospitals, penitentiaries, schools, etc.

The President of the Board publishes monthly and yearly reports describing all the work performed by the different branches and recommending measures calculated to improve the existing conditions. The Board being considered as the supreme authority on all sanitary matters, it has the supervision of all the local boards outside of Havana and is consulted on all sanitary matters. Those boards are supposed to keep the Superior Board well informed so that the latter may have a complete knowledge and understanding of the sanitary status of the different towns; the jurisdiction of each local board being restricted to the district to which it belongs.

The National Laboratory is a direct dependency of the Superior Board of Health, its principal object being the performance of scientific investigations which are very important for the proper execution of the sanitary work for which the Board is responsible. Its organization has been regulated so as to include the following branches or sections:

Clinical Microscopy, devoted to the examination of sputa, blood, urine, and all specimens necessary to facilitate the diagnosis and early determination of the infectious and contagious diseases.

The *Bacteriological* Section has charge of medical researches with reference to the causes of epidemics and epizooties as well as to the preparation of laboratory products such as tuberculine, maleine, vaccine, etc.

The next section is the one devoted to *Histological and Pathological* work that proves of so much assistance in all laboratory work.

There is also a *Medico-Legal* section to assist the courts of justice in the investigation of crimes, by examining viscera and other materials from the medical and chemical standpoints.

The Chemical Department is also equipped with all the modern scientific appliances for the analysis of water supply, wines, beverage, milk and all kinds of food. For more data concerning the National Laboratory, the reader is referred to our special pamphlet.

With the view of helping the diagnosis of doubtful cases of contagious diseases the Board has appointed a Commission of several members selected from among the physicians of high

standing in the town; this has proved of great value and has been of great assistance in the work of the Board.

The Sanitary Department of Havana is the main branch of the Superior Board of Health and embraces the following sections: Main Office, General sanitary inspections, Disinfection, Tuberculosis Dispensary and "Las Animas" Hospital for infectious and contagious diseases. The Main Office is in charge of all orders, laws and regulations, Statistics, Records, Fines and Penalties, Sanitary Engineering, Property and Disbursing Office.

Among the duties of the General sanitary Inspectors, are the inspection and examination of the cases of contagious diseases, the supervision of public and private schools, dairies, stables, prostitution, and Bacteriological Stations, as well as the markets, asylums, bakeries, breweries, confectionaries and all factories, tennement houses, etc.

Whenever a case of a contagious disease is reported, either by the attending physician or through any other channel, a medical inspector is at once detailed to examine the patient; if the diagnosis is confirmed, he immediately recommends the necessary measures of isolation and reports it to the Chief Sanitary Officer for final decision, stating the existing conditions with every detail, including his own opinion about the cause of the disease, number of people living in the same house, number of children and the school they attend to, etc., so as to notify the Director of the School not to admit in his college any of the children from the infected house. If necessary the medical inspectors are authorized to obtain blood, urine, sputa, etc., for bacteriological examination, the result of which is directly communicated to the Chief Sanitary Officer. If the case is a doubtful one, it is referred to the Commission of infectious diseases, already mentioned.

The school inspection includes the sanitary conditions of the buildings and the medical examination of both teachers and students.

The Havana Commission of Special Hygiene has in charge the inspection of the prostitutes; but the Sanitary Department undertakes that of the houses and premises occupied by the latter as well as of any other diseases except the venereal group.

The problem of Tuberculosis is also considered for the purpose of carrying out the best methods and ideas. To that effect the Department runs a Dispensary exclusively dedicated to the care and treatment of pulmonary troubles, whereby the outdoor patients are benefited, while an opportunity is afforded for coming in touch with the incipient cases that otherwise would escape the action of the authorities. The physical culture of the children is also given in the same building after which they get some nourishment, so much wanted by that class of patients.

The anti-tuberculosis plan includes the inspection of houses, hotels, boarding houses, cigar factories, dairy stables, etc., and the disinfection of premises as well as the delivery of lectures on the prophylaxis of the disease in all factories and institutions, besides the distribution of pamphlets and circulars with the recommendations to be followed for the prevention and hygiene of tuberculosis.

The hospital for infectious and contagious diseases, otherwise known as "Las Animas" Hospital, is well equipped being provided with every convenience suitable for this kind of institution and its main feature is that it is entirely mosquito-proof, as can be seen in our exhibits at the Palace of Education and Social Economy, (Block 6), **Louisiana Purchase Exposition**. This hospital has been conspicuous in the eradication of yellow fever from Havana and in it are admitted the imported cases from Mexico and other countries, with complete safety for the city. (Vide our special pamphlet about "Las Animas" Hospital).

The disinfection work is divided into two sections:

1st.—Disinfection of places where a case of contagious disease has occurred.

2nd.—Sanitation of the houses that, by their conditions, may become a menace to the public health.

The first one includes the disinfection of infected places, isolation of contagious cases treated at home and the inspection of houses where other cases have previously occurred. The second section is dedicated to the sanitation and cleaning of filthy houses, to the house to house inspections and to that of food and drinks.

To comply with these duties there is organized a sanitary police force to watch and see that the orders from the Sanitary Department are strictly observed.

During the campaign for the eradication of yellow fever, the work was based on the accepted fact that the transmission of the disease is only possible through mosquitoes, and the routine work was carried out in the following manner:

As soon as a case was reported, the medical inspector went to the house and, if he found the case to be a suspicious one, he immediately ordered the isolation of the patient and notified the Chief Sanitary Officer, so that the case might be examined by the Commission of Infectious diseases. When circumstances permitted, the isolation was established in the patient's home, by means of wire screens (16 threads to one inch) placed at the doors, windows, etc., so as to prevent the escape of infected mosquitoes and to prevent others, from outside, from getting in and infecting themselves. At the same time, the rest of the house was thoroughly disinfected by burning pyrethrum powder. This killing of mosquitoes was extended to the neighboring houses and to the patient's own room as soon as he could be removed to another, after the end of the case.

As Havana is entirely free from yellow fever to-day, the work in connection with this disease is limited to the cases found in the steamers coming from Mexico or from other infected places abroad, and to those developed in quarantine where non-immunes are kept during the period of incubation. These cases are transferred to "Las Animas" Hospital and all the means of transportation, (ambulance, stretcher, etc.), are made mosquito-proof. Any case reported in town as suspicious of yellow fever is dealt with in the same manner as in time of epidemics.

The role of the mosquito having been recognised in the transmission of yellow fever, malaria and filariasis, the Department has established a section known as the "Mosquito Division" dedicated to the destruction of the mosquitoes at its different stages of development. There are two Brigades: the *Stegomyia*, and the *Anopheles* Brigades; which, as their names imply, are devoted to the persecution of those species. The work is carried out according to the following plan:

1st.—Inspection of houses to avoid the deposit of stagnant water.

2nd.—Distribution of petroleum in all receptacles, sewers, drains, cisterns, wells, etc.

3rd.—Ditching of public places, where water may collect and removal of obstructions which may impede its flow in drains or streams; and

4th.—To see that all barrels, tanks, or any other deposits are covered so as to make them mosquito-proof.

When other infectious diseases have to be dealt with the plans are modified according to the characteristics of each; so for instance in Typhoid fever, the examination and analysis of the water supply and other sources of infection, diagnosis by Widal's reaction, disinfection of faeces and urine, distribution of literature concerning the disease, etc., are carefully attended to.

Such is in substance the general organization of the Public Health Service in Cuba.

The complete success which has resulted from a strict compliance with the methods outlined above, with reference to yellow fever, after 36 months of uninterrupted exemption from that disease as well as from small-pox (since 4 years ago) all over the Cuban territory, is too well known to require further emphasizing. But it is very satisfactory for the Cuban Sanitary Department to be able to quote the following appreciation of its anti-malarial work, by such an authority as Colonel W. C. Gorgas, who had charge of that Department until the end of May 1902:

"I am obliged for your reports, which I receive regularly and congratulate you upon the excellent showing you make in every direction.... Havana is the only city, I think, that is doing systematic and anti-malarial work, and your results are very remarkable."

In confirmation of the above the following comparative data have been tabulated:

Deaths that have occurred in the district of Havana from Yellow fever, Small pox and Malaria, Since January 1st, 1900.

MONTHS	1900			1901			1902			1903			1904		
	Yellow fever	Small pox	Malaria	Yellow fever	Small pox	Malaria	Yellow fever	Small pox	Malaria	Yellow fever	Small pox	Malaria	Yellow fever	Small pox	Malaria
January	8	..	13	7	..	12	..	..	4	..	..	2	..	..	3
February	9	..	27	5	..	15	..	..	5	..	..	4	..	..	2
March	4	..	33	1	..	10	..	..	9	..	..	4	..	..	3
April . . . . .	..	..	30	..	..	11	..	..	8	..	..	6	..	..	4
May	2	1	30	..	..	18	..	..	12	..	..	5	..	..	2
June	8	..	39	..	..	11	..	..	9	..	..	3	..	1	7
July	30	1	24	1	..	11	..	..	7	..	..	9	..	..	..
August	49	..	40	2	..	16	..	..	8	..	..	6	..	..	..
September	52	..	31	2	..	11	..	..	6	..	..	3	..	..	..
October	74	..	25	..	..	20	..	..	5	..	..	4	..	..	..
November	54	..	15	..	..	12	..	..	2	..	..	3	..	..	..
December	20	..	18	..	..	4	..	..	2	..	..	2	..	..	..
TOTAL . . .	310	2	325	18	..	151	..	..	77	..	..	51	..	..	..

